

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An AC-input/AC-output bidirectional power converter comprising converter cells, each of said cells comprising:

a first AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

a second ~~AC/DC~~ DC/AC converter whose DC side is connected to the DC side of said first AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power;

a third AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

a fourth ~~AC/DC~~ DC/AC converter whose DC side is connected to the DC side of said third AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power; and

a high-frequency transformer which is connected between the AC side of said second ~~AC/DC~~ DC/AC converter and the AC side of said third AC/DC converter, wherein

the AC nodes of said first AC/DC converters in said plurality of converter cells are connected in series with each other, and the AC nodes of said fourth ~~AC/DC~~ DC/AC converters in said plurality of converter cells are connected in series with each other.

2. (Previously Presented) A power converter as claimed in claim 1, wherein said power converter is directly connected in each phase to a three-phase AC power supply system.

3. (Currently Amended) A bidirectional power converter for performing bidirectional power conversion between AC and DC, comprising converter cells, each of said cells comprising:

a first AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

a second ~~AC/DC~~ DC/AC converter whose DC side is connected to the DC side of said first AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power;

a third AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power; and

a high-frequency transformer which is connected between the AC side of said second ~~AC/DC~~ DC/AC converter and the AC side of said third AC/DC converter, wherein

the AC nodes of said first AC/DC converters in said plurality of converter cells are connected in series with each other, and the DC nodes of said third AC/DC converters in said plurality of converter cells are connected in series with each other.

4. (Canceled)

5. (Previously Presented) A power converter as claimed in claim 3, wherein the AC side of said power converter is directly connected in each phase to a three-phase AC power supply system.

6. (Currently Amended) A motor drive equipped with a power converter ~~as claimed in claim 1~~ which is an AC-input/AC-output bidirectional power converter comprising converter cells, each of said cells comprising:

a first AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

a second DC/AC converter whose DC side is connected to the DC side of said first AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power;

a third AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

a fourth DC/AC converter whose DC side is connected to the DC side of said third AC/DC converter, and which performs bidirectional power conversion between single-

phase AC power and DC power; and

_____ a high-frequency transformer which is connected between the AC side of said second DC/AC converter and the AC side of said third AC/DC converter, wherein

_____ the AC nodes of said first AC/DC converters in said plurality of converter cells are connected in series with each other, and the AC nodes of said fourth DC/AC converters in said plurality of converter cells are connected in series with each other.

7. (Currently Amended) A BTB system comprising a power converter ~~as claimed in claim 1~~ which is an AC-input/AC-output bidirectional power converter comprising converter cells, each of said cells comprising:

_____ a first AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

_____ a second DC/AC converter whose DC side is connected to the DC side of said first AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power;

_____ a third AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

_____ a fourth DC/AC converter whose DC side is connected to the DC side of said third AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power; and

_____ a high-frequency transformer which is connected between the AC side of said second DC/AC converter and the AC side of said third AC/DC converter, wherein

_____ the AC nodes of said first AC/DC converters in said plurality of converter cells are connected in series with each other, and the AC nodes of said fourth DC/AC converters in said plurality of converter cells are connected in series with each other.

8. (Previously Presented) A grid-linking inverter system for linking between a DC system and an AC system, comprising a power converter as claimed in claim 3.